SANWA

AIRTRONICS
Get The Advantage

http//www.sanwa-denshi.co.jp

EXZES X 2.4GHz

2.4GHz

- **Powerful, Light and Fast**
- **Fastest Response in the World**
- **Ultimate Receiver Reliability**
- **Easy-to-Use**

Key Features:

- 4 Channel Computer Radio With Advanced Programming for Competition Cars, Trucks, and Boats
- Compatible With Current SANWA/AIRTRONICS 2.4GHz FHSS-2 Surface Receivers
- 6 Cell Dry Cell Battery Holder
- High-Power FHSS-3 Technology Gives The Best Reception And Connectivity Giving Racers Added Assurance
- 2.4GHz FHSS-3 System Is Integrated Into The Radio System Eliminating The Need For Modules.
- Large Backlit Multi-Function LCD
- Adjustable Gimbal Angle
- Adjustable Control Stick Length/Tension
- Key-Lock Switch
- Assignable Digital Trim Switches
- Simple 3 page Programming
- Timer Vibration
- 30 Model Memory
- Battery Voltage Monitor
- User naming
- White or Blue Multi-Function LCD
- Servo Monitor
- Exponential Tweak
- Two Compensation Mixes
- Anti-Lock Braking System
- Brake Mixing
- Throttle Hold
- Starting Position
- Model copy
- Model Select

GEMINI X

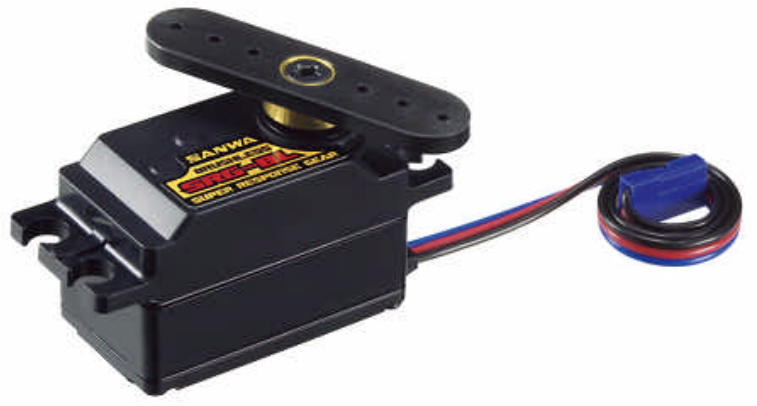
2.4GHz Digital High Responce System

- Powerful, Light and Fast
- Fastest Response in the World
- Ultimate Receiver Reliability
- Easy-to-Use

Key Features:

- 3 Channel 2 Stick 2.4G Computer Radio With Advanced Programming for Competition Cars, Trucks, and Boats
- Compatible With Current SANWA/AIRTRONICS 2.4GHz FHSS-2/3 Surface Receivers
- 4 Cell Dry Cell Battery for Lighter Weight-Also Accepts 2 Cell Li-Po or Li-Fe
- High-Power FHSS-3 Technology Gives The Best Reception And Connectivity Giving Racers Added Assurance
- 18 Model Memory
- Servo Reversing
- Steering Dual Rate
- EPA
- Exponential
- Step AUX
- Four Wheel Steering Mixing
- Dual Throttle Mixing w/Dig & Burn
- Brake mixing (BR Hold function)
- AUX mixing (ST → 3CH, TH → 3CH)
- Programmable Fail safe
- Receiver Battery Failsafe
- Point Auxiliary
- Programmable Trim Switch
- Model Naming
- Model Select
- Model Clear
- Battery type (4cell/6cell)

SRG-BL
BRUSHLESS MOTOR



■SPEED : 0.10sec/60°(6.0V)
■TORQUE : 8.0Kg cm(6.0V)
■SIZE : 40.5×21.0×26.5mm
■WEIGHT : 44g

S.S.R. Technology gives servo response that is 5 times faster using the new Sanwa Matched S.S.R receiver RX-451R and Brushless SRG-BL servo system.
To truly feel the difference in this SSR technology, you must match the SSR receiver to the SSR servos appropriate for your vehicle.

SD-5G

DIGITAL PROPORTIONAL SYSTEM

2.4GHz Frequency Hopping Digital Spread Spectrum

1. **The SD-5G is Full range 6ch 2.4GHz receiver included packed with capabilities for all type of aircraft.**
2. **3 MODEL MEMORY**
3. **DIRECT MODEL SELECT**
4. **V-TAIL**
5. **DELTA**
6. **LARGE LCD**

SD-6G

DIGITAL PROPORTIONAL SYSTEM

2.4GHz Frequency Hopping Digital Spread Spectrum

1. Full range 6ch 2.4GHz receiver for all type of aircraft/Heli
2. 10 MODEL MEMORY
3. DIRECT MODEL SELECT
3. LARGE LCD 64 X128 FULL DOT

(AERO)

- 3 FLIGH MODE
- TH-CURVE 5POINT
- DUAL ELEVATOR

(HELI)

- TH-CURVE 5POINT
- SWASH PLATE TYPE 9
- CP-EPA
- SWASH MIXING

Get The Advantage

MX-3X 2.4Ghz Radio Set FHSS

RESPONSE SPEED

	MIN	MAX	AVERAGE
MX-3X	2.4	14.4	8.4
SPEKTRUM DX-3S	5.4	16.4	10.9

- Powerful, Light and Fast
- Fastest Response in the World
- Ultimate Receiver Reliability
- Easy-to-Use

Highlights:

1) The world's fastest response with newly developed microcomputer system in this category.

2) Dedicated 2.4Ghz system in combination with a 6 cell Ni-MH battery results in a much lighter radio

3) Strong tolerance to heat and a low-voltage tolerance to 2.0V results in a receiver that will not brown out or fade due to temperature spikes and voltage drops.

4) Compatible with the full line of Sanwa Car 2.4Ghz FHSS-2/FHSS-3 receivers.

MX-3X transmitter can use Sanwa brand 2.4GHz FHSS-2 receivers (FHSS receiver of M11, FHSS receiver of MX-3FG and receiver) and M11X FHSS-3 receiver .

Key Features:

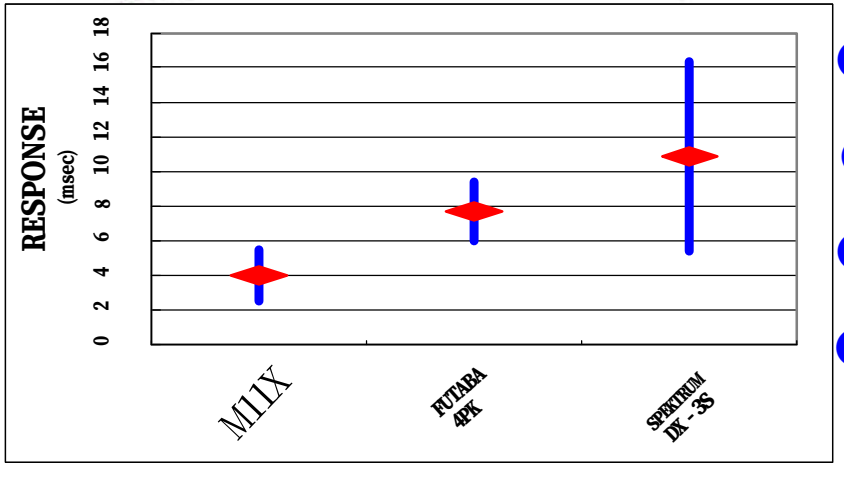
- 3 Channel Computer Radio With Advanced Programming for Competition Cars, Trucks, and Boats
- Compatible With Current SANWA/AIRTRONICS 2.4GHz FHSS-2/3 Surface Receivers
- Model Names Can be Assigned
- High-Power FHSS-3 Technology Gives The Best Reception And Connectivity Giving Racers Added Assurance
- 18 Model Memory
- Exponential Control Settings for Steering and Throttle
- ST, TH Speed
- AUX SW (H⇔L)
- Position AUX(2-6 position)
- Step AUX (Available for step setting)
- CRAWLER MIXING
- 2 ESC mixing (TH Hold function)
- Brake mixing (BR Hold function)
- AUX mixing (ST → 3CH, TH → 3CH)
- Failsafe (FH3F/FH3 mode only)
- Battery Failsafe (FH3F/FH3 mode only)
- Editing function for model name/Mode name indication function
- Mode Type(FH3F/FH3/FH2)
- Key Assign (Trim key)
- Key Click (on/off)
- Battery Alarm (on/off)
- Battery type (4cell/6cell)

Get The Advantage

M11X 2.4Ghz Radio Set FHSS

RESPONSE SPEED

	MIN	MAX	AVERAGE
M11X	2.5	5.5	4
FUTABA 4PK	6	9.4	7.7
SPEKTRUM DX-3S	5.4	16.4	10.9



- Powerful, Light and Fast
- M11X - Fastest Response in the World
- Ultimate Receiver Reliability
- Easy-to-Use Powerful Programming

Highlights:

1) The world's fastest response with newly developed microcomputer system

2) Dedicated 2.4Ghz system in combination with a 6 cell Ni-MH battery results in a much lighter radio

3) Strong tolerance to heat and a low-voltage tolerance to 2.0V results in a receiver that will not brown out or fade due to temperature spikes and voltage drops.

4) Compatible with the full line of Sanwa Car 2.4Ghz FHSS-2 receivers.

M11X transmitter can use Sanwa brand 2.4GHz FHSS-2 receivers (FHSS receiver of M11, FHSS receiver of MX-3FG and receiver) and M11X FHSS-3 receiver.

Key Features:

- 4 Channel Computer Radio With Advanced Programming for Competition Cars, Trucks, and Boats
- Compatible With Current SANWA/AIRTRONICS 2.4GHz FHSS-2 Surface Receivers
- Ball Race Supported Steering Wheel and Trigger With Adjustable Spring Tensions
- High-Power FHSS-3 Technology Gives The Best Reception And Connectivity Giving Racers Added Assurance
- 2.4GHz FHSS-3 System Is Integrated Into The Radio System Eliminating The Need For Modules.
- Transmitter Can Be Adjusted For Left or Right Handed Drivers
- Adjustable Back Light Display and Vibration Settings
- Variable Rate Adjustment Can Be Used to Self-Calibrate or Compensate the Servo Movement to 100% When the Steering Wheel Has Been Limited to Move Less
- User and Model Names Can be Assigned
- Assignable Switches and Trims
- Vibration Setting for Timer Notifications in Noisy Environments
- Adjustable Dial Can be Set for Dig Functions, Remote Needle Valve Settings, or Reverse Functions
- 30 Model Memory
- Customizable Menu for Commonly Used Features Instead of Scrolling Through the Radio Menu
- Easy Navigation Menu
- Easily Activated and Inhibited Mixing Functions While Driving
- Failsafe Programming Available On All Channels for Electric and Nitro/Gas Use
- Multi-Function Timer/ Lap Counter
- Electronic Traction Control
- Anti-Lock Braking System
- Throttle Hold Setting for Reliable Pit Stops for Nitro/Gas Use
- Speed Sensitive Steering and Brake Adjustments
- Exponential Control Settings for Steering and Throttle
- Adjustable Rate Control Settings for Steering and Throttle
- Throttle and Brake Mixing for Large Gas Vehicles

M11(FHSS-2)/MX-3FG(FHSS-2)

Sanwa announces new high power output 2.4GHz surface radio!

Highlights:

1)High output power, full range, even on the water
2)100% receiver-forward compatibility. All surface FHSS-2 receivers are compatible with all FHSS-2 transmitters. If you buy an MX-3 today, the RX will be compatible with M11 FHSS-2 and M11X tomorrow.
3)Frequency hopping spread spectrum (FHSS) provides more security in harsh, crowed environments.
4)Fast refresh rate will make you feel "connected" to your car in a way only a digital signal can provide.
5)Same great, proven transmitter designs and programmability as the original MX-3 and M11 computer radios.
6)MX-3FG added feature: an easy-opening door on the front of the TX hides the finding button; now it's much easier to use the TX-RX radio link.
7)Small, lightweight receiver is compatible with all typical hobby servos, both analog and digital.
8)TX/Module sets available to use in the M11 and Exzes Plus radios. You can got with FHSS-2 2.4GHz in all of these Sanwa surface radios.

2.4GHz receiver for CAR

RX-371(3CH)
Weight : 9.5g
Size : 30 x 26.5 x 14.5 mm

RX-442(4CH)
Weight : 9.5g
Size : 30 x 26.5 x 15.8 mm

RX-451
Weight : 9g
Size : 36.5 x 24 x 14.5 mm

RX451R(4CH)
Weight : 9g
Size : 36.5 x 24 x 14.5 mm

S.S.R RX-451R receiver combo

S.S.R RX-451R RECEIVE COMBO

Including Brushless SRG-BZ x 1/BZ x 1 servo or including Brushless SRG-BR x /BR x 1 servo with switch harness and Horn/absorber set

S.S.R. Technology gives servo response that is 5 times faster using the new Sanwa Matched S.S.R receiver RX-451R and Brushless SRG-BR/BZ servo system.
To truly feel the difference in this SSR technology, you must match the SSR receiver to the SSR servos appropriate for your vehicle.

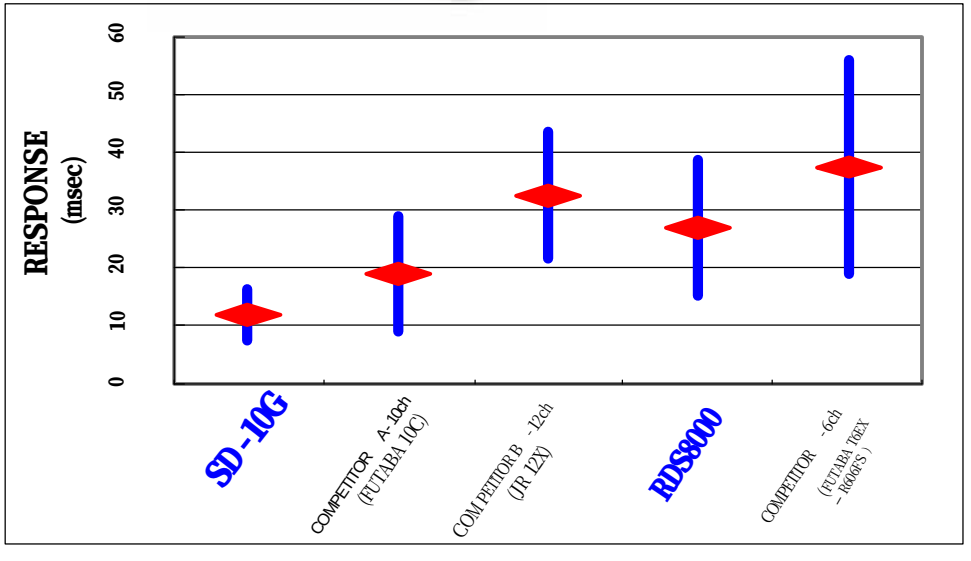
RDS8000 2.4GHz 8Ch Radio set

Highlights:

1. The RDS8000 is a full-featured 8-channel system, packed with capabilities for all type of aircraft.
2. The RDS8000 is noted for its ease of operation and programming.
3. Helicopters, fixed wing aircraft and sailplane pilots will all benefit when using standard features of the RDS8000.
4. One of the key features of the RDS8000 is the ability to use both basic or advanced program menu. Whether flying basic model or one that requires advanced features.
5. Full range 8ch 2.4GHz receiver included.

SD-10G 2.4Ghz 10Ch Radio Set (TX/RX) FHSS

MODEL	MIN	MAX	AVERAGE
SD-10G	7.36	16.3	**11.83**
A社-10ch (FUTABA 10C)	9	29	**19**
COMPETITOR B-12ch (JR 12X)	21.5	43.5	**32.5**
RDS8000	15.1	38.8	**26.95**
COMPETITOR-6ch (FUTABA T6EX - R606FS)	19	56	**37.5**



- **Powerful, Light and Fast**
- **SD-10G - Fastest Response in the World**
- **Ultimate Receiver Reliability**
- **Easy-to-Use Powerful Programming**

These numbers are accurate because our engineer measured all models in the same circumstances by using oscilloscope.

Highlights:

1. **The world's fastest response with newly developed microcomputer system.**
2. **The simultaneous response of each servo in modes such as CCPM and Dual elevator due to our brand-new algorithm dramatically improves smooth and even servo operation in mixed functions.**
3. **Dedicated 2.4Ghz system in combination with a 6 cell Ni-MH battery results in a much lighter radio.**
4. **Strong tolerance to heat and a low-voltage tolerance to 2.0V results in a receiver that will not brown out or fade due to temperature spikes and voltage drops.**
5. **Compatible with the full line of Sanwa Aircraft 2.4Ghz receivers including the RDS8000 receiver as well as the new 6 and 7 channel lightweight receivers.**
6. **Competition grade 100% ball-bearing supported gimbals with adjustable spring tension and adjustable throttle stick tension and ratcheting.**

2.4GHz receiver for SKY (Full range)

RX-700(7CH)
Weight : 10.8g
Size : 47.8 x 23.2 x 12.6 mm

RX-841
Weight : 15g
Size : 47.8 x 27.4 x 15.4 mm

RX-1011
Weight : 15g
Size : 49.5 x 26.8 x 15.5 mm

RX600
Weight : 9.8g
Size : 41.0 x 23.0 x 12.9mm mm

RX60 (FOR PARK FLY)
Weight : 6g(4.7g without case)
Size : 40.5 x 18.5 x 11 mm

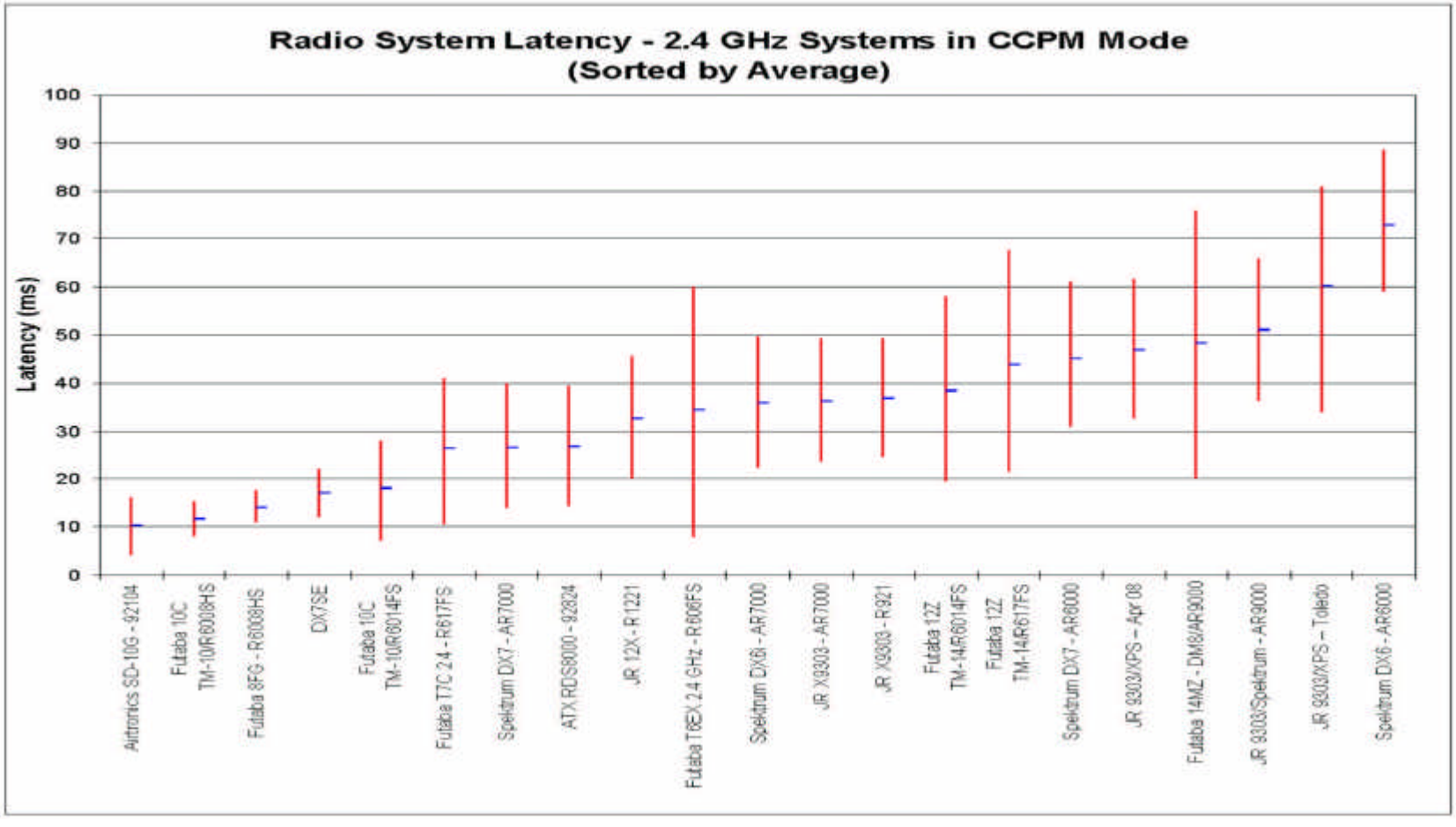
4 TIMES F3J WORLD CHAMPION
Daryl Perkins

F3J JR WORLD CHAMPION
Cody Remington

Former-AMA-Pattern-National-Champion
Mark Atwood

Skip Miller
First-Time-F3J-World-

(9)SKY RADIO COMPARISON OF RESPONSE



I just wanted to share the news !

1)M11 and M11X win Buggy and Truggy at the ROAR NATS.

2)BRAND NEW M11X Won 3 1st place finished at the ROAR Nats in the Hands of Ryan Cavalieri and Ryan Maifield.

3)At the NAMBA Nationals, Eric won TWO different boat classes with his Super Exzes 2 stick surface radio running the FHSS-2 2.4GHz module and Receiver!

I just wanted to share the news !

The SD-10G won the 2M sailplane class in the hands of Mike Fox! And with Skip Miller's 4th place finish and Cody's 10th place finish, the SD-10G had 3 top 10 places at it's first Sailplane Nats!

I just wanted to share the news !

As many of you already know, very recently our BRAND NEW M11X and EXZES-X Won as follows.

1)M11X win Sportman class and open class at the 2009 JMRCA 1/10 Engine touring car

2)EXZES-X win at IFMAR 1/8 Engine racing car World Championship in the hands of Lamberto Collari.
Top 3 drivers was using ERG-WS.

World Champion specification servo-ERG-WS

Speed:0.09sec/60 °
Torque:6.0Kg·cm(6.0V)
Size :39 x 20 x 37.4mm
Weight: 59g

Company Profile

Company Name : Sanwa Electronic Instrument Co.,Ltd

Foundation : August 1959

Establishment : September 1976

Fiscal : March (1 time per year)

Employees : 111 (Except Overseas office & employees)

Location : Head Office 1-2-50, Yoshida Honmachi, Higashi-Osaka, Osaka

TEL : +81-72-962-1231

FAX : +81-72-964-2831

OEM Sales Dept TEL : +81-72-962-2148

R C Sales Dept TEL : +81-72-962-2531

Business Purpose : A development design and manufacturing and selling of an electronic control equipment

All the incidental business about the above

Sales product : Radio control equipment for hobbies

(Radio control equipment for RC & Robot)

Remote control equipment (Ultrasonic wave, Infrared radiation System)

(For TV, DVD PLAYER, Air Conditioner, Light, etc)

In addition, industrial remote-control equipment (low or Specific low-power)

(Remote control for garage shutters, Touch system automatic door,

Bathroom drier, Remote control for water heater, etc)

JSA
QMS
ISO 9001:2000
JSAQ 972

JSA
EMS
ISO 14001:2004
JSAE 993

HEAD OFFICE

SED－HK

Vietnam Factory (ATH)

China Factory (SED)

◎ Infrared ／Signal transmission ／Waterproof system ： For various requirements

ドア用遠隔スイッチ
（電波方式）

SANWA
The Control of Dreams

The END